AUTHOR INDEX

Abraham, R. J., c1 Albersheim, P., 131 Alföldi, J., 353 Al-Timari, U. A. R., 49

Badga, D., 353 Banno, A., 345 Bondo, P. B., 261 Brasch, D. J., 287

Chambers, E. J., c1 Chou, K. J., 131 Coddington, J. M., 287 Cunningham, D., 175

Darvill, A. G., 131 De Marco, A., 15 De Wit, D., 253 Deffieux, A., 337 Demleitner, S., 239, 247 Depew, W. T., 101 Dudley, R. L., 29

Ebringerová, A., 353 Ertl, P., 49

Fantom, E., 337 Fayet, C., 337 Fièvre, S., 1 Fišera, L., 49 Fontanille, M., 337 Franz, G., 239, 247

Gariboldi, P., 15 Gelas, J., 337 Goljer, I., 49 Gray, G. R., 313 Grundwald-Wyspiańska, M., 179 Grützmacher, H.-F., 189 Gurjar, M. K., 233

Hay, G. W., 101 Helin, J., 155 Hicks, K. B., 29 Hindsgaul, O., 219 Hizukuri, S., 279 Hoffmann, R. A., 303 Hronowski, L. J. J., 101 Huang, D.-b., 29

Inoue, Y., 197

Jain, R. K., 91 Jeffrey, G. A., 29 Jhurry, D., 337 Johansson, L. A. M., 253

Kamerling, J. P., 303 Kanda, Y., 197 Kaur, K. J., 219 Kieboqm, A. P. G., 253 Kobayashi, S., 197 Kochetkov, N. K., 331 Kovác, P., 189 Kováčík, V., 189 Kozioł, A. E., 43 Kraus, J., 239, 247 Krebs, A., 101

Lee, E., 175 Leppänen, A., 155 Lis, T., 43 Lusa, S., 155

Maaheimo, H., 155
Maat, L., 253
Maciejewska, W., 179
Manley-Harris, M., 327
Maruta, N., 279
Matta, K. L., 91
McArdle, P., 175
Melody, N., 175
Melton, L. D., 287
Michalski, J.-C., 1
Molinari, H., 15
Montreuil, J., 1

Nakamura, Y., 79 Niemann, C., 119 Niemelä, R., 155 Nifant'ev, N. E., 331 Nitsch, E., 29

Odonmažig, P., 353 Ogawa, S., 79 Okada, M., 345 O'Neill, M. A., 131

Penttilä, L., 155 Pfannemüller, B., 119 Pfeffer, P. E., 29 Polewski, K., 179 Reddy, K. R., 233 Redgwell, R. J., 287 Redlich, H., 57 Renkonen, O., 155 Richards, G. N., 327 Robison, P. D., 131

Saenger, W., 119 Sakakibara, T., 271 Seppo, A., 155 Serianni, A. S., 209, 261 Seta, A., 271 Sharma, G. V. M., 185 Shashkov, A. S., 331 Stepniak, K., 43 Strecker, G., 1 Sudau, W., 57 Sumimoto, H., 345 Szardenings, A. K., 57 Szarek, W. A., 101 Takaide, A., 271 Takeda, Y., 279 Thomas, W. A., c1

Van den Berg, R., 253 Van Rantwijk, F., 253 Vepachedu, S. R., 185 Verotta, L., 15 Vilkman, A., 155 Vliegenthart, J. F. G., 303 Vollerthun, R., 57

Wieruszeski, J.-M., 1 Wu, J., 209, 261

Yamamoto, Y., 197

Zeller, S. G., 313

SUBJECT INDEX

- Acarviosin analogues having the α-manno configuration, synthesis and enzyme-inhibitory activity of methyl, 79
- Acetals, ethylenic, of sucrose and their copolymerization with vinyl monomers, 337
- N-Acetylglucosaminyİtransferase-III, combined chemical-enzymic synthesis of a dideoxypentasaccharide for use in a study of the specificity of, 219
- (1→3)-N-Acetyl-β-D-glucosaminyltransferase of human serum, elongation of both branches of biantennary backbones of oligo-(N-acetyllactosamino)glycans by, 155
- Agrobacterium radiobacter (ATCC 53271), evidence that the acidic polysaccharide secreted by, has a seventeen glycosyl-residue repeating unit, 131
- Alginic acids, analysis of *Macrocystis pyrifera* and *Pseudomonas aeruginosa* by the reductivecleavage method, 313
- Allofuranose, an n.m.r. analysis and the X-ray structure of 1,2-O-isopropylidene-3-O-methylα-D-, 175
- Amylose-Rose Bengal complexes, a spectroscopic study, 179
- Amylose subfractions with different molecular sizes, synthesis of, 279
- Amyloses, low molecular weight, with modified terminal groups, enzymic synthesis of, 119
- Analogues of methyl acarviosin having the a-manno configuration, synthesis and enzyme-inhibitory activity of, 79
- X-Antigenic trisaccharide, incorporation at the nonreducing ends of oligosaccharides in a rapid synthesis, 91
- Antitumour activity of derivatives of curdlan and lichenan branched at C-6, synthesis and, 239
- Antitumour activity of sulfoalkyl derivatives of curdlan and lichenan, synthesis and, 247
- Apricot (Armeniaca siberica Lam.), structures of pectic polysaccharides isolated from the Siberian, 353
- Arabinoxylan from the endosperm of wheat, structural features of a water-soluble, 303
- L-Ascorbate dihydrate, crystal structure of lithium, 43
- 5a-Carbapyranoses (pseudo sugars), radical cyclisation of hept-1-enitols to give, 57
- Carbohydrate isoxazolidines, regio- and stereoselective synthesis by 1,3-dipolar cycloaddition of nitrones to a sugar alkene, 49

- Chemical synthesis of 4-deoxy-(1→6)-α-D-xylohexopyranan and 3,4-dideoxy-(1→6)-α-Derythro-hexopyranan, 345
- Chemical-enzymic synthesis of a dideoxypentasaccharide for use in a study of the specificity of N-acetylglucosaminyltransferase-III, combined. 219
- Conformational analysis of 6-deoxy-6-fluoro-Dglucopyranose, 6-deoxy-6-fluoro-D-galactopyranose, and 4-deoxy-4-fluoro-D-glucopyranose in solution by ¹H-n.m.r. spectroscopy, Cl
- Copolymerization, ethylenic acetals of sucrose and their, with vinyl monomers, 337
- Crystal structure of lithium L-ascorbate dihydrate, 43
- Curdlan and lichenan, synthesis and antitumour activity of derivatives branched at C-6, 239
- Curdlan and lichenan, synthesis and antitumour activity of sulfoalkyl derivatives, 247
- Cycloaddition of nitrones to a sugar alkene, regioand stereo-selective synthesis of carbohydrate isoxazolidines by 1,3-dipolar, 49
- Cyclomalto-hexaose and -heptaose, 6-O-(α-maltosyl)-, n.m.r. study on the formation and geometry of inclusion complexes with p-nitrophenol in aqueous solution, 197
- 4-Deoxy-(1→6)-α-D-xylo-hexopyranan and 3,4-dideoxy-(1→6)-α-D-erythro-hexopyranan, chemical synthesis of, 345
- Di- and tri-saccharide segments of a phenolic glycolipid of *Mycobacterium kansasii*, synthesis of, 233
- Di-D-fructose dianhydride derivatives, mass spectra of some, 327
- Enzymic synthesis of low molecular weight amyloses with modified terminal groups, 119
- Fluoro-substituted methyl hexopyranosides, potential use of mass spectrometry for positional identification of the fluorine in, 189
- Fluoro sugars in solution, conformational analysis of some, by ¹H-n.m.r. spectroscopy, c1
- O-α-L-Fucopyranosyl-(1→2)-O-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxy-β-D-glucopyranoside, synthesis of methyl, 331
- α-L-Fucosylating agent, use of 2,3,4-tri-O-benzoyl-α-L-fucopyranosyl bromide as an, 331
- Furo[2,3-b]furans, a radical-mediated stereoselective route for the construction from D-xylose of chiral, 185

β-D-Glucosaminyltransferase of human serum, (1→3)-N-acetyl-, elongation of both branches of biantennary backbones of oligo-(N-acetyllactosamino)-glycans by, 155

D-(1,5,6-¹³C₃)Glucose and D-(2,5,6-¹³C₃)glucose, synthesis of multiply substituted ¹³C monosac-

charides, 261

α,β-D-Glucoses, 4,6-di-O-β-D-galactopyranosyl-, 6-O-β-lactosyl-α,β-lactoses, and 1-O-(6-O-β-lactosyl-β-lactosyl)-(R,S)-glycerols, synthesis and characterization of, 101

(R,S)-Glycerols, 1-O-(6-O-β-lactosyl-β-lactosyl)-, 6-O-β-lactosyl-α,β-lactoses, and 4,6-di-O-β-Dgalactopyranosyl-α,β-D-glucoses, synthesis and characterization of, 101

Glycolipid of Mycobacterium kansasii, synthesis of di- and tri-saccharide segments of a phenolic, 233

Hept-1-enitols, radical cyclisation to give 5a-carbapyranoses (pseudo sugars), 57

Hexopyranan and 3,4-dideoxy-(1→6)-α-D-erythro-hexopyranan, chemical synthesis of 4-deoxy-(1→6)-α-D-xylo-, 345

Inclusion complexes of 6-O-(α-maltosyl)cyclomalto-hexaose and -heptaose with p-nitrophenol in aqueous solution, n.m.r. study on the formation and geometry of, 197

1,2-O-Isopropylidene- and 1,2:5,6-di-O-isopropylidene-3-O-methyl-α-D-allofuranose, an n.m.r.

analysis of, 175

Kiwi fruit, structures of the pectic polysaccharides from the cell walls of, 287

Lactosaminoglycans, oligo-, N-acetyl-, elongation of both branches (1→3)-N-acetyl-β-D-glucosaminyl transferase, 155

α,β-Lactoses, 6-O-β-lactosyl-, 1-O-(6-O-β-lactosyl-β-lactosyl)-(R,S)-glycerols, and 4,6-di-O-β-D-galactopyranosyl-α,β-D-glucoses, synthesis and characterization of, 101

Lactulose trihydrate, crystal structure and ¹³C CPMAS n.m.r. analysis, 29

Lichenan and curdlan, synthesis and antitumour activity of derivatives branched at C-6, 239

Lithium L-ascorbate dihydrate, the crystal structure of, 43

Mass spectra of some di-D-fructose dianhydride derivatives, 327

Mass spectrometry, potential use for positional identification of the fluorine in methyl deoxy-fluorohexopyranosides, 189

Methyl acarviosin analogues having the α-manno configuration, synthesis and enzyme-inhibitory activity of, 79 Methyl per-O-acetyl-x-deoxy-x-fluoro-α-D-hexopyranosides, positional identification of fluorine in, by electron impact and chemical ionisation mass spectrometry, 189

Methyl O-α-L-fucopyranosyl-(1→2)-O-β-D-galactopyranosyl-(1→3)-2-acetamido-2-deoxyβ-D-glucopyranoside, synthesis of, 331

Monosaccharides, multiply ¹³C-substituted: synthesis of D-(1,5,6-¹³C₃)-glucose and D-(2,5,6-¹³C₃)glucose, 261

Mycobacterium kansasii, synthesis of di- and trisaccharide segments of a phenolic glycolipd of, 233

3-Nitro-2-enopyranoside derivatives in 1,3-dioxolane, photoaddition reactions of, 271

Nitrones, regio- and steroselective synthesis of carbohydrate isoxazolidines by 1,3-dipolar cycloaddition to a sugar alkene, 49

N.m.r. analysis of 1,2-*O*-isopropylidene- and 1,2:5,6-di-*O*-isopropylidene-3-*O*-methyl-α-D-allofuranose, 175

N.m.r. spectroscopy, 1D and 2D, isotope-edited, of ¹³C-substituted carbohydrates, 209

N.m.r. spectroscopy, elucidation of the structure and conformation of a methylated tetrasaccharide-alditol acetate by, 15

N.m.r. spectroscopy, ¹H- and ¹³C-, of four human milk oligosaccharides, 1

N.m.r. spectroscopy, ¹H-, conformational analysis of 6-deoxy-6-fluoro-D-glucopyranose, 6-deoxy-6-fluoro-D-galactopyranose, and 4-deoxy-4-fluoro-D-glucopyranose in solution by, C1

N.m.r. study on the formation and geometry of inclusion complexes of 6-O-(α-maltosyl)cyclomalto-hexaose and -heptaose with p-nitrophenol in aqueous solution, 197

Oligosaccharides from human milk, structures of,

Oligosaccharides containing the X-antigenic trisaccharide (α-L-Fucp-(1→3)-[β-D-Galp-(1→4)] -β-D-GlcpNAc) at their non-reducing ends, rapid synthesis, 91

Oxidation of sucrose in aqueous N,N-dimethylformamide, the periodate, 253

Pectic polysaccharide isolated from the Siberian apricot (Armeniaca siberica Lam.), structures of, 353

Pectic polysaccharides from the cell walls of kiwi fruit, structures of the, 287

Pentasaccharide for use in a study of the specificity of N-acetyl-glucosaminyltransferase-III, combined chemical-enzymic synthesis of a dideoxy-, 219

- Periodate oxidation of sucrose in aqueous N,Ndimethylformamide, the, 253
- Photoaddition reactions of 3-nitro-2-enopyranoside derivatives in 1,3-dioxolane, 271
- Polysaccharide, evidence that the acidic, secreted by Agrobacterium radiobacter (ATCC 53271), has a seventeen glycosyl-residue repeating unit, 131
- Polysaccharide from wheat endosperm, structural features of a water-soluble arabinoxylan, 303
- Polysaccharides from the cell walls of kiwi fruit, structures of the pectic, 287
- Polysaccharides isolated from the Siberian apricot (Armeniaca siberica Lam.), structures of pectic, 353
- Radical cyclisation of hept-1-enitols to give 5acarbapyranoses (pseudo sugars), 57
- Radical-mediated stereoselective route for the construction of chiral furo[2,3-b]furans from p-xylose, 185
- Reductive-cleavage method, analysis of Macrocystis pyrifera and Pseudomonas aeruginosa alginic acid by the, 313
- Repeating unit, evidence that the acidic polysaccharide secreted by Agrobacterium radiobacter (ATCC 53271) has a seventeen glycosyl-residue. 131
- Rose Bengal, a spectroscopic study of complexes of amylose with the dye, 179
- Saccharides, octa-, nona-, and undeca-, human milk, structure of, 1

- Spectroscopic study of amylose-Rose Bengal complexes, a, 179
- Structure and conformation of a methylated tetrasaccharide-alditol acetate, elucidation by n.m.r. spectroscopy, 15
- Subfractions of amylose having different molecular sizes, structures of, 279
- ¹³C-Substituted carbohydrates, isotope-edited 1D and 2D n.m.r. spectroscopy of, 209
- ¹³C-Substituted (multiply) monosaccharides: synthesis of D-(1,5,6-¹³C₃)glucose and D-(2,5,6-¹³C₃)glucose, 261
- Sucrose, ethylenic acetals of, and their copolymerization with vinyl monomers, 337
- Sucrose in aqueous N,N-dimethylformamide, the periodate oxidation of, 253
- Sulfoalkyl derivatives of curdlan and lichenan, synthesis and antitumour activity of, 247
- Synthesis, enzymic, of low molecular weight amyloses with modified terminal groups, 119
- Tetrasaccharide-alditol acetate, elucidation by n.m.r. spectroscopy of the structure and conformation of a methylated, 15
- Wheat endosperm, structural features of a watersoluble arabinoxylan from, 303
- D-Xylose, a radical-mediated stereoselective route for the construction of chiral furo[2,3-b]furans from, 185